AMENDMENT UNDER 37 C.F.R. § 1.114(c) Attorney Docket No.: Q80748

U.S. Application No.: 10/812,064

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A method for obtaining resin product design parameters for use

in an event of designing a resin product to be molded by injection molding, the method

comprising the steps of: obtaining a mold clamping force required for conducting injection

molding of a resin product having a specified shape using a computer-aided optimization

method; and obtaining the design of said resin product based on the thus obtained mold clamping

force, and

in which a process parameter for determining an inflow of a resin material from a

plurality of resin inflow conduits connecting with a cavity is used as a variable parameter for

determining said mold clamping force,

wherein said process parameter is a parameter which controls actions of valve gates

located at said plurality of resin inflow conduits, and

wherein process parameters are optimized under the condition where at least one of the

valve gates is opened at any spot of time during filling stage.

2-4. (canceled).

5. (currently amended): The method for obtaining resin product design parameters

according to Claim 4Claim 1, wherein said valve gate is controlled by choosing either full

opening or full closing.

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6. (canceled).

7. (previously presented): The method for obtaining resin product design parameters

according to Claim 1, wherein resin material for molding is thermoplastic resin.

8. (previously presented): The method for obtaining resin product design parameters

according to Claim 1, wherein resin material for molding is polypropylene-base resin.

9. (previously presented): The method for obtaining resin product design parameters

according to Claim 1, wherein resin material for molding is low flow resin.

10. (previously presented): The method for obtaining resin product design parameters

according to Claim 1, wherein the material of the product is determined based on the mold

clamping force determined by an optimization method.

11. (previously presented): The method for obtaining resin product design parameters

according to Claim 1, wherein the thickness distribution of the product is determined based on

the mold clamping force determined by an optimization method.

12. (previously presented): The method for obtaining resin product design parameters

according to Claim 1, wherein the thickness distribution of the product is determined by an

optimization method under constraint conditions for the mold clamping force.

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molding under an optimized condition.

13. (currently amended): A method for producing of a resin product, the method comprising a step of molding a resin product designed obtained in the method for designing a resin productobtaining resin product design parameters according to Claim 1 through injection

14. (currently amended): An injection molding device comprising:

a molding device main body which feeds a molten resin to a mold having a plurality of resin inflow conduits to a cavity therethrough;

a memory section which memorizes molding parameters determined by a computer-aided optimization methodresin product design parameters obtained in the method according to Claim 1; and

a control section which conducts injection molding while controlling said molding device main body based on molding parameters corresponding to a predetermined mold clamping forcesaid resin design parameters.